CONTRACT INSPECTION REPORT

CONTRACT NO.

TASK NO.

25X

TO:

CONTRACT ADMINISTRATION & SETTLEMENT
BRANCH/PD/OL

DATE
24 November 1965

INSPECTION REPORT NO. *(If final, so state)*
3

ESTIMATED COMPLETION DATE
1 April 1966

X1

NAME OF CONTRACTOR

Declass Review by NGA.

TYPE OF COMMODITY OR SERVICE

AP-3 Stereo Comparator

THE CONTRACTOR IS ON SCHEDULE
☒ YES ☐ NO

PER CENT OF WORK COMPLETED - 50%
PER CENT OF FUNDS EXPENDED - 50%

THE CONTRACTOR WILL PROBABLY REMAIN WITHIN ALLOCATED FUNDS ☒ YES ☐ NO IF ANSWER IS "NO" ADVISE RECOMMENDATION AND/OR ACTION OF SPONSORING OFFICE, ON REVERSE HEREOF. IF KNOWN, INDICATE MAGNITUDE OF ADDITIONAL FUNDS INVOLVED.

HAS AN INTERIM REPORT, FINAL REPORT, PROTOTYPE, OR OTHER END ITEM BEEN RECEIVED FROM THE CONTRACTOR DURING THE PERIOD? ☐ YES ☒ NO *(If yes, give details on reverse side.)*

HAS GOVERNMENT-OWNED PROPERTY BEEN DELIVERED TO CONTRACTOR DURING THIS PERIOD? ☐ YES ☒ NO
(If yes, indicate items, quantity, and cost on reverse side.)

INCENTIVES

IS THIS AN INCENTIVE CONTRACT ☐ YES ☒ NO FP
IF YES, CHECK TYPE
☐ COST ☐ PERFORMANCE ☐ DELIVERY

NOTE:
USE REVERSE SIDE FOR COMMENTS.
FINAL REPORT MUST CONTAIN INCENTIVE EVALUATION.

OVERALL PERFORMANCE OF CONTRACTOR

1. ☐ OUTSTANDING
2. ☐ EXCELLENT
3. ☐ ABOVE AVERAGE
4. ☒ AVERAGE
5. ☐ BELOW AVERAGE
6. ☐ BARELY ADEQUATE
7. ☐ UNSATISFACTORY

IF OVERALL PERFORMANCE OF CONTRACTOR IS UNSATISFACTORY OR BARELY ADEQUATE, INDICATE REASONS ON REVERSE SIDE.

RECOMMENDED ACTION

☒ CONTINUE AS PROGRAMMED
☐ WITHHOLD PAYMENT PENDING SATISFACTORY PERFORMANCE
☐ TERMINATE
☐ OTHER *(Specify)*

IF TERMINATION IS RECOMMENDED OR IF THIS IS A FINAL REPORT PUT COMMENTS ON REVERSE IN NARRATIVE FORM ON CONTRACTOR'S PERFORMANCE AND CERTIFY THAT ALL DELIVERABLE ITEMS UNDER THE CONTRACT HAVE BEEN RECEIVED. THESE INCLUDE, WHERE APPLICABLE, THE FOLLOWING:

ITEM	REC'D	DOES NOT APPLY	ITEM	REC'D	DOES NOT APPLY
PROTOTYPES			MANUALS		
DRAWINGS AND SPECIFICATIONS			FINAL REPORT		
PRODUCTION AND/OR OTHER END ITEMS			SPECIAL TOOLING		
			OTHER GOVERNMENT PROPERTY		

DATE OF LAST CONTACT WITH CONTRACTOR
23 November 1965

SIGNATURE OF INSPECTOR

DIVISION

25X

INSPECTOR'S EXTENSION

NARRATIVE REPORT ☒ INTERIM ☐ FINAL

X1 On 23 November 1965, [redacted] of P&DS along with [redacted] 25X
X1 [redacted] of TID visited the [redacted] Research Lab to monitor 25X
the programming portion of AP-3 Analytical Stereoplotting system.

1. The assembly of the AS-11A computer will be completed next week and it will be put through check out procedures which ordinarily take two to three weeks. The computer will next be modified for the AP-3 system; this will consist mainly of adding 10 memory lines and servo logic for the coordinatograph. It is estimated that it will take three to four weeks for modifications and check out, so it will be approximately the end of January before it is ready as an AP-3 computer.

2. The model 35 AW automated teletype has been ordered and will be delivered the end of December. The code to be used is the ASA standard teletype 8 level, 7 channels plus parity check in the eight level.

3. The programming is underway, the frame program is 50% complete and work has started on the real time programs. It was requested that the entire system, Model 35 input-output as well as Tally Reader input output, be put on one code system-the ASA standard teletype code.

X1 The [redacted] programmers suggested the following output format:

	8 digits	6 digits	6 digits	6 digits	6 digits
1st line	M ID No.	X_m	Y_m	E_m	D_m
2nd line	P ID No.	X_1	Y_1	X_2	Y_2

The first line designated by M would be model coordinates and the model distance in millimeters and microns.

The second line designated by P would be the X and Y coordinates of the point on the first photo and the second photo. A three way switch on the teletype would give the option of printing the first line, the second line, or both.

A discussion arose on the possibility of the distance (D_m) printout being a ground distance instead of a model distance. [redacted] will investigate 25X
but are not very optimistic over being able to provide this feature.

TID personnel had reservations about printing out the entire first line each time when in many cases only the distance (D_m) is required. They will
X1 discuss this back at the Center and [redacted] will be notified if the option of only printing D_m is desired by TID.

X1 4. Terrestrial Photography: [redacted] requested the range of focal lengths we expect to use and they were informed that focal lengths from 21mm to 1000mm would be used with most of them in the range of 55 to 200mm. [redacted] 25X
will program to handle 20 to 1280mm focal lengths and a difference of 10% in focal lengths between photos will be accommodated . Up to 45° conveyence, 9° inclination and 0° to 90° declination will be provided for in the program. Lens distortion, earth curvature, and air refraction correction will be included in this program. The program will allow for work 25% forward and back of the

range to the reference plane.

5. Frame and Convergent Pan Photography: The contract only requests a range of focal lengths of 1 to 48 inches. The monitor requested this be extended to 1000 inches. [redacted] stated this could not be done under the scope of the present contract. Upon further questioning [redacted] indicated they have a contract with ACIC under which they are trying to extend the range of focal lengths. A request to increase the maximum yaw from ±9° to ±60° was rejected. [redacted] would require supplemental funds for a project.

X1 25X X1

6. Strip Photography: The monitor had expected to have the mathematical transformations for strip photography available for this meeting but the Chief, TID/TAB stated it would take until the first of the year to debug the mathematical model. Strip photography in general was discussed with the [redacted] programmers and they expressed interest in submitting a proposal to program this into the AP-3 system when the mathematical model is available.

X1

7. Training Courses: The monitor requested that [redacted] submit proposals for training programmers and maintainence personnel for AP-3 system.

25X

8. Off Line Support: The AP-3 system will require off line support. This support will consist mainly of computing the coefficients for model deformation.

9. Image Correlation: The image correlation unit, which is not included in our system, was demonstrated on the AP-2. The correlation was very good and the automatic contouring was rapid and reasonably accurate.

Repeatability was demonstrated by having the unit trace over a contour proceeding from the opposite direction.